Purpose Developers designed the THAT as a brief, self-report alternative to instruments like the Maintenance of Wakefulness Test and the Alpha Attenuation Test - time-consuming measures that require specialized laboratory equipment and advanced training to conduct. Consisting of ten items, the THAT presents several psychological states relating to alertness (the ability to think creatively, to concentrate, and to see details clearly, for example) and asks respondents to rate how often in the past week they have experienced those states. Just as the Epworth Sleepiness Scale (Chap. 29) acts as a complementary measure to the Multiple Sleep Latency Test rather than a pure facsimile, the THAT functions well in conjunction with the ZOGIM-A (Chap. 102), which measures a different facet of alertness.

**Population for Testing** The scale has been validated with a sample of patients referred to a sleep clinic for evaluation whose mean age was  $42\pm14$ .

**Administration** The scale is a self-report, pencil-and-paper measure requiring approximately 5 min for completion.

**Reliability and Validity** An initial psychometric evaluation of the scale [1] demonstrated an internal consistency of .96, and a test-retest reliability of .82. Results on the THAT also differed significantly for patients found to have narcolepsy.

**Obtaining a Copy** A copy of the scale can be found in the original article published by developers [1].

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**Scoring** Respondents use a six-point, Likert-type scale to indicate how frequently they experience certain feelings relating to alertness. The scale ranges from 0 (meaning "not at all") to 5 ("all the time"), though it is reversed for the questionnaire's final two items to ensure respondent compliance. The scale provides a total score ranging from 0 to 50, with higher scores denoting greater levels of alertness.

Toronto Hospital Alertness Test (THAT)

This questionnaire tries to establish how alert you feel. In reporting your feeling, we would like you to consider your last week. Use the following scale to check one response for each question.

	Not at all	Less than 1/4 of the time	1/4 to 1/2 of the time	½ to ¾ of the time	More than 3/4 of the time	All the time I was awake
		of the time	the time	the time	of the time	1 was awake
During the last week, I felt	0	1	2	3	4	5
Able to concentrate						
Alert						
Fresh						
Energetic						
Able to think of new ideas						
Vision was clear, noting all details (e.g., driving)						
Able to focus on the task at hand						
Mental facilities were operating at peak level						
Extra effort was needed to maintain alertness						
In a boring situation, I would find my mind wandering						

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Note: This scale contributed the second word in the title of this book (see Chap. 91 for STOP).

## Reference

 Shapiro, C.M., Auch, C., Reimer, M., Kayumov, L., Heslegrave, R., Huterer, N., Driver, H., & Devins, G. (2006). A new approach to the construct of alertness. *Journal of Psychosomatic Research*, 60, 595–603.

## **Representative Studies Using Scale**

Moller, H.J., Devins, G.M., Shen, J., & Shapiro, C.M. (2006). Sleepiness is not the inverse of alertness: evidence from four sleep disorder patient groups. *Experimental Brain Research*, 173(2), 258–266.

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